



the standard in safety

Underwriters  
Laboratories

VP Engineering  
BARRIER TECHNOLOGY CORP  
510 4TH ST N  
PO BOX 379  
WATKINS MN 55389

Date: 2010/11/09  
Subscriber: 406647001  
PartySite: 83718  
File No: R21591  
Project No: 10CA46215  
PD No: 10M56038  
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Subject: Procedure And/Or Report Material

The following material resulting from the investigation under the above numbers is enclosed.

Issue

<u>Date</u>	<u>Vol</u>	<u>Sec</u>	<u>Pages</u>	<u>Revised Date</u>
	2		Revised Authorization Page(s)	2010/11/05
	2		Marking Data Page(s)	
	2		New Section General Page(s) 2	2010/11/05
2010/11/05	2		Revised Section General Page(s) 1 Add New Indep Report	2010/11/05

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

Please review this material and report any inaccuracies to UL's Customer Service Professionals. Contact information for all of UL's global offices can be found at <http://www.ul.com/global/eng/pages/corporate/contactus>.

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NBK File



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Underwriters  
Laboratories

File R21591

Vol 2

Issued: 2010-03-19  
Revised: 2010-11-08

FOLLOW-UP SERVICE PROCEDURE  
(TYPE R)

BUILDING UNITS  
(BZXX)

\*\*\*\*\*

Complementary Product Category  
BUILDING UNITS  
(BZXXC)

Manufacturer: BARRIER TECHNOLOGY CORP  
(406647-001) 510 4TH ST N  
PO BOX 379  
WATKINS MN 55389

Applicant: SAME AS MANUFACTURER  
(406647-001)

Classified Company: SAME AS MANUFACTURER  
(406647-001)

This Procedure authorizes the above manufacturer to use the marking specified by Underwriters Laboratories Inc.(UL), or any authorized licensee of UL, only on products covered by this Procedure, in accordance with the applicable UL Services Agreement.

The prescribed Mark or Marking shall be used only at the above manufacturing location on such products which comply with this Procedure and any other applicable requirements.

The Procedure contains information for the use of the above named Manufacturer and representatives of Underwriters Laboratories Inc. and is not to be used for any other purpose. It is lent to the Manufacturer with the understanding that it is not to be copied, either wholly or in part, and that it will be returned to Underwriters Laboratories Inc. (UL) or any authorized licensee of UL, upon request.

This PROCEDURE, and any subsequent revision, is the property of Underwriters Laboratories Inc.(UL) and the authorized licensee of UL and is not transferable.

Underwriters Laboratories Inc.

Stephen Hewson  
Senior Vice President  
Global Follow-Up Service Operations

William R. Carney  
Director  
North American Certification Program

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

CLASSIFICATION MARK

COMPOSITION AND ELEMENT:

The Classification Mark shall consist of the following and shall appear on the product.

For building units investigated to ANSI/UL 263, the Classification Mark reads:

BUILDING UNIT  
FIRE RESISTANCE CLASSIFICATION  
DESIGN NO(S) . \_\_\_\_\_  
SEE UL FIRE RESISTANCE DIRECTORY  
<10ES or 24CP>

or

BUILDING UNIT  
FIRE RESISTANCE CLASSIFICATION  
SEE UL FIRE RESISTANCE DIRECTORY  
<10ES or 24CP>

For building units investigated to ANSI/UL 1709, the Classification Mark reads:

BUILDING UNIT  
FIRE RESISTANCE CLASSIFICATION  
RAPID TEMPERATURE RISE FIRE EXPOSURE  
DESIGN NO(S) . \_\_\_\_\_  
SEE UL FIRE RESISTANCE DIRECTORY  
<10ES or 24CP>

or

BUILDING UNIT  
FIRE RESISTANCE CLASSIFICATION  
RAPID TEMPERATURE RISE FIRE EXPOSURE  
SEE UL FIRE RESISTANCE DIRECTORY  
<10ES or 24CP>

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

MARKING:

The following symbol must be located adjacent to (left side of text), and as part of, the regular Classification Mark.



The minimum height of the registered trademark symbol ® shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

PROCUREMENT:

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized label suppliers can be found on UL's online directory at [www.ul.com](http://www.ul.com).

## ULC Listing Mark Data Page

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

## LISTING MARK

The Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested.



XXXX = The control number assigned by ULC, 10ES.

The product identity is: "BUILDING UNITS" or appropriate product identities, as shown in the individual Listing.

The product identity may be omitted if the Mark is directly and permanently applied to the product by stamping, molding, ink-stamping, silk screening or similar process. The product identity may appear elsewhere on the product if the other three elements are part of the nameplate, which includes the rating or the catalog or model designation.

Separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include the four elements.

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier.

## GENERAL

## PRODUCT COVERED:

USC, **CNC** The product covered by this Procedure is a building unit.

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USC indicates investigation to UL 263.

**CNC** indicates investigation to Canadian Standard **CAN/ULC-S101M**.

## FACTORY LOCATION AND IDENTIFICATION:

Location	Identification+
Watkins, MN	None

+ - In lieu of a Factory Identification, the plant location by address or city and state may be used.

## CLASSIFICATION MARKING:

The finished material complying with all the specifications set forth in the Descriptive Sections is eligible to bear the Markings shown in the Classification Marking Data Pages in the front of this Procedure Volume.

The information in the Classification Marking Data Page(s) may be complemented with the following:

1. Classification Marking Data Page BZXX:

MATERIAL DESIGNATION: Building Units

## MARKING:

In addition to the Classification Marking of Underwriters Laboratories Inc. the following shall be on each panel:

1. Classified Company's name or the file designation R21591.
2. Product designation.

1. Classification Marking Data Page BZXXC:

MATERIAL DESIGNATION: Building Units

MARKING:

In addition to the Classification Marking of Underwriters Laboratories Inc. the following shall be on each panel:

1. Classified Company's name or the file designation R21591.
2. Product designation.



the standard in safety

Underwriters  
Laboratories

File R21591  
Project 10CA46215

November 5, 2010

REPORT

on

BUILDING UNITS  
(BZXXC)

BARRIER TECHNOLOGY CORP.  
WATKINS, MN

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DESCRIPTION

PRODUCT COVERED:

BUILDING UNITS (BZXXC) - Type Blazeguard 1-Side and Type Blazeguard 2-Side covered in Volume 2, Section 1.

GENERAL:

These products are Classified as to fire resistance and covered in Follow-Up Service Procedure R21591, Volume 2, and are intended for use only in specific fire resistive designs where specified in UL's Fire Resistance Directory.

Refer to UL's & ULC's Fire Resistance Directory or UL's & ULC's Online Certifications Directory for detailed design information and definitions relative to fire resistance design ratings and the intended use of the product covered herein.

TEST RECORD NO. 1

TEST REFERENCE

For the results of previous evaluations and tests conducted on samples and test assemblies including the products covered by this Report, refer to the Document Managing System, various independent reports and letter reports under File R21591.

TEST RECORD NO. 2

GENERAL

The purpose of this investigation was to evaluate Barrier Technology's request to create new ULC Designs based on UL designs U348, U349, and U350. An engineering evaluation was conducted to determine compliance with Standard CSA/ULC S-101-07, entitled, "Standard Method of Fire Endurance Tests of Building Construction and Materials", Fourth Edition dated July, 2007.

Products - Building Units - Type Blazeguard 1-Side and Type Blazeguard 2-Side covered under Volume 2.

Project - 10CA46215

Standards - Standard Methods of Fire Endurance Tests of Building Construction and Materials CAN/ULC-S101-04, Third Edition, dated April 2004.

Fire Endurance Test - The ULC S101 fire endurance tests were waived based on an engineering evaluation. Refer to "Study for Classification."

STUDY FOR CLASSIFICATION

Refer to Test Reference No. 1

TEST RECORD SUMMARY

The results of this investigation indicate that the product evaluated complies with the applicable requirements of the Standard, Fire Tests of Building and Construction Materials, CAN/ULC-S101-07, and therefore such product is judged eligible to bear ULC's Mark as described on the Conclusion Page of this Report.

Report by:

Reviewed by:

Mohamed Shaban, P Eng.  
Senior Project Engineer  
Building Materials/ Life Safety &  
Securities

Ahmad Mangou, MSc, P Eng  
Senior Project Engineer  
Building Materials / Life Safety &  
Securities

TEST RECORD NO. 3

GENERAL

The purpose of this investigation was to evaluate Barrier Technology's request to revise the application rate of the Pyrotite coating, specified in there Follow-Up Service Procedure under Volume 2 Section 1, from 0.66 lb/ft<sup>2</sup> to 0.60 lb/ft<sup>2</sup>

Products - Building Units - Type Blazeguard 1-Side and Type Blazeguard 2-Side covered under Volume 2.

Project - 10CA46215

Standards - ANSI/UL263, entitled, "Fire Tests of Building Construction and Materials," Thirteenth Edition, dated April 4, 2003, and CAN/ULC-S101-04 "Standard Methods of Fire Endurance Tests of Building Construction and Materials", Third Edition, dated April 2004.

The UL 263, and ULC S-101, fire endurance tests were waived based on an engineering evaluation. Refer to "Study for Classification."

STUDY FOR CLASSIFICATION

Refer to Test Reference No. 2

TEST RECORD SUMMARY

The results of this investigation indicate that the product evaluated complies with the applicable requirements of the Standard, "Fire Tests of Building and Construction Materials", ANSI/UL 263 (ASTM E119, NFPA No. 251) and "Fire Tests of Building and Construction Materials", CAN/ULC-S101-07, and therefore such product is judged eligible to bear ULC's Mark as described on the Conclusion Page of this Report.

Report by:

Reviewed by:

Mohamed Shaban, P Eng.  
Senior Project Engineer  
Building Materials/ Life Safety &  
Securities

Ahmad Mangou, MSc, P Eng  
Senior Project Engineer  
Building Materials / Life Safety &  
Securities

## CONCLUSION:

A sample of the product covered by this Report is judged to be eligible for Classification and Follow-Up Service. The manufacturer is authorized to use the ULC Mark on such products which comply with the Follow-Up Procedure and any other applicable requirements of Underwriters Laboratories of Canada Inc. Only those products, which properly bear the ULC Mark are considered as Classified by Underwriters Laboratories of Canada Inc. Any information and documentation involving ULC Mark services are provided on behalf of Underwriters Laboratories Inc. (ULC) of any authorized licensee of ULC.

## Report by:

Mohamed Shaban, P Eng.  
Senior Project Engineer  
Building Materials/ Life Safety &  
Securities

## Reviewed by:

Ahmad Mangou, MSc, P Eng  
Senior Project Engineer  
Building Materials / Life Safety &  
Securities